CLAIMS

1. A valve prosthesis apparatus, in particular for cardiac applications, apparatus (10) comprising a valve prosthesis (20) applied on a suture ring (30); apparatus (10) that is characterised in that said valve prosthesis (20) is fastened to said suture ring (30) by magnetic means (21d, 30b).

2. Valve prosthesis apparatus (10) as claimed in claim 1, characterised in that said magnetic means (21d, 30b) are contained in a respective continuous groove (21c, 30a) obtained respectively on said valve prosthesis (20) and on said suture ring (30).

3. Apparatus (10) as claimed in claim 2, characterised in that at least one part of said magnetic means (21d) are contained in a continuous groove (21c, 30a) obtained in a stent (21), which is a part of said valve prosthesis (20).

4. Apparatus (10) as claimed in either of the claims 2 or 3, characterised in that said magnetic means (21d, 30b) comprise a plurality of magnets (21d, 30b).

5. Apparatus (10) as claimed in either of the claims 2 or 3, characterised in that said magnetic means (21d, 30b) comprise magnets with annular shape.

6. Apparatus (10) as claimed in any of the previous claims, characterised in that said valve prosthesis (20) comprises a stent (21) and valve strips (40).

7. Apparatus (10) as claimed in claim 6, characterised in that said valve strips (40) are made of a biomaterial.

8. Apparatus (10) as claimed in claim 7, characterised in that said biomaterial is derived from corneal stroma, in particular from corneal stroma of tuna fish.

9. Apparatus (10) as claimed in any of the previous claims, characterised in that at least one portion of said valve prosthesis (20) and at least one portion of said suture ring (30) are coated by a synthetic tissue (50) able to facilitate the suture of said valve prosthesis (20) and of said suture ring (30).

10. Apparatus (10) as claimed in claim 1, characterised in that said valve prosthesis and said suture ring are made of deformable materials such as to allow their insertion into the body of a patient through a catheter, i.e. without having to proceed to a traditional heart surgery operation.

11. Apparatus (10) as claimed in claim 10, characterised in that the magnets are immersed in said

deformable materials.

12. Apparatus (10) as claimed in either of the claims 10 or 11, characterised in that the suture ring is made of a synthetic material, in particular polyester.

13. Apparatus (10) as claimed in any of the claims 10, 11, 12, characterised in that the suture ring has a plurality of hooks able to facilitate its fastening in the implant site.

14. A system for implanting in the human body a prosthetic apparatus comprising a magnetic valve prosthesis and a magnetic suture ring which are easily deformable by compression; said implant system comprising the following steps:

(a) temporarily reducing by compression the dimensions of the magnetic valve prosthesis (module no. 2) and the magnetic suture ring (module no. 1) in such a way as to allow their insertion in a catheter able to transport said modules no. 1 and no. 2 in the implant site;

(b) inserting said catheter carrying said modules no. 1 and no. 2 into a peripheral vein or artery under constant angiographic control;

(c) releasing the suture ring, which is expanded until assuming the original dimensions, once it reaches the implant site;

(d) fastening said suture ring in the implant site;

(e) releasing the valve prosthesis, which is expanded until assuming the original dimensions, once it reaches the implant site; and

(f) magnetically fastening said valve prosthesis to said suture ring.